CLAIMS

What is claimed is:

1. An apparatus comprising:

a first queue to track a current rate of task completion;

a second queue to track an average rate of task completion over time;

a comparator to compare an average of the first queue and an average of the second queue; and

a throttle to reduce the number of connections available on the apparatus if the comparator indicates that the average of the first queue is larger than the average of the second queue.

2. The apparatus of claim 1, wherein the first queue and the second queue are circular queues.

3. The apparatus of claim 1, further comprising:

a timer to compute a length of time a connection is used, and to add the time to the first queue.

4. The apparatus of claim 1, wherein the average of the first queue is added to the second queue.

5. The apparatus of claim 1, further comprising:

a trigger mechanism to trigger a comparison, the trigger mechanism triggering comparisons more often as the number of connections is decreased.

6. The apparatus of claim 5, further comprising:

a powers array to indicate when to trigger a comparison to the trigger mechanism, the powers array being an exponentially increasing/decreasing function.

7. The apparatus of claim 1, further comprising:

a sensitivity multiplier applied to the average of the second queue to affect reaction speed.

8. The apparatus of claim 1, wherein the connections comprise network connections for sending messages, and wherein the apparatus comprises a multimedia messaging service center.

9. The apparatus of claim 1, wherein the rate of task completion tracked by the system comprises timing one subtask of a complex task, the subtask reflecting a load on the system.

10. A FIDO monitor comprising:

a comparator to compare an average rate of task completion with an average of the average rates of task completion; and

the throttle to reduce the number of tasks executed by an apparatus coupled to the throttle if the average rate of task completion is higher than the average of the average rates of task completion.

11. The FIDO monitor of claim 10, wherein the comparator further includes a multiplier to multiply the average of the averages by a sensitivity multiplier, to adjust a reaction speed of the system.

12. The FIDO monitor of claim 10, further comprising:

a measure queue to track the average rate of task completion.

13. The FIDO monitor of claim 12, further comprising:

a timer to time a length of use of a connection and to add the time to the measure queue.

14. The FIDO monitor of claim 12, wherein the measure queue is a circular queue.

15. The FIDO monitor of claim 10, further comprising:

an averages queue to track the averages of the average rate of task completion.

16. The FIDO monitor of claim 15, further comprising:

an averager to calculate an average of the values in the measure queue and add the average to the averages queue.

17. The FIDO monitor of claim 15, wherein the averages queue is a circular queue.

18. The FIDO monitor of claim 10, further comprising:

a trigger mechanism to trigger the comparison, the trigger mechanism adjusting a frequency of comparison based on a result of a previous comparison;

if the system is slowing down measuring more frequently, and if the system is speeding up measuring less frequently.

19. The FIDO monitor of claim 10, wherein the throttle further increases the number of connections available if the average rate of task completion is lower than the average of the average rates of task completion.

20. A method of resource allocation comprising:

comparing a current average rate of task completion to an average of averages;

if the current average rate of task completion is larger than the average of averages, reducing a number of tasks executed by the system.

21. The method of claim 20, further comprising:

triggering the comparison based on an a number of measurements of the current rate of task completion.

22. The method of claim 21, further comprising:

adjusting the comparison trigger based on results of a last comparison.

23. The method of claim 22, wherein if the system is speeding up the comparison is triggered less frequently, and if the system is slowing down the comparison is triggered more frequently.

24. The method of claim 23, wherein a frequency is set by a powers array, the power array being a powers-of-two array; and

shifting along the powers-of-two array to speed up or slow down the rate of triggering the comparison.

25. The method of claim 20, further comprising:

timing a period of time that a connection is used; and

adding the period of time to a first queue, the average of the first queue being the current average rate of task completion.

26. The method of claim 25, further comprising:

adding the average of the first queue to a second queue, the average of the second queue being the average of averages.

27. The method of claim 26, wherein the first queue and the second queue are circular queues.

28. The method 26, wherein the average of the first queue and the average of the second queue are calculated when a comparison is triggered.

29. The method of claim 28, wherein a current average of the first queue is added to the second queue after the average of the second queue is calculated.

30. The method of claim 20, wherein measuring task completion comprises measuring one subtask of a complex task, the subtask reflecting an overall load on the system.

31. A task throttling apparatus comprising:

a first means for tracking an average rate of task completion;

a second means for tracking an average of averages; and

a means to determine whether a current average is greater than an average of averages; and

a throttle to adjust an availability of resources based on the results of the comparison.